Morgan Stanley

INVESTMENT MANAGEMENT

Infrastructure Investing and the Shifting Macro Environment

REAL ASSETS | GLOBAL LISTED INFRASTRUCTURE | INVESTMENT INSIGHT | 2017

As we start 2017, we take this opportunity to explore the impact of the evolving geopolitical landscape on infrastructure in the U.S., particularly given the outcome of the U.S. presidential election and the uncertainty inherent in a transition of power. In the immediate aftermath of the surprise victory by Donald Trump in the U.S. presidential election, infrastructure investing came into sharp focus as equity and debt markets forcefully extrapolated outcomes based on campaign rhetoric. Infrastructure investing was a favorite talking point of Trump on the campaign trail, one which he continues to emphasize postelection. The ultimate impact of a Trump presidency is uncertain, however. Trump's focus on infrastructure with his \$1 trillion proposal is likely to be positive, but details remain scarce with respect to the level of private market participation, as well as the mechanisms by which federal policy will translate down to the state and municipal level, where the majority of infrastructure is funded. According to recent estimates by the American Society of Civil Engineers, \$3.3 trillion in spending is required by 2025 to meet infrastructure needs in the U.S., of which 43 percent remains unfunded, leaving little reason to doubt the seriousness of Trump's intentions. However, as state and local governments account for over three-quarters of infrastructure spending, we must emphasize a waitand-see approach to understanding precisely how Trump intends to close the spending gap.

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¹American Society of Civil Engineers, Failure to Act: Closing the Infrastructure Investment Gap For America's Economic Future, 2016.

² Congressional Budget Office, Public Spending on Transportation and Water Infrastructure, 1956 to 2014, March 2015.

As this relates to an investment in infrastructure securities, the immediate post-election reaction was decidedly mixed. While many investors embraced the sector as an area that may benefit from Trump administration policies, others focused on the sharp rise in interest rates as cause for concern in sectors perceived to be more defensive in nature. We believe both the euphoria and concern are likely to have been overblown. We will address the potential impact of both:

1. IMPACT OF AN INFRASTRUCTURE SPENDING PLAN:

Infrastructure spending was a frequent topic of conversation throughout the U.S. presidential election cycle and is likely to be a key initiative during the Trump administration. Increased spending, should it materialize, could be a positive catalyst, but the key questions are to which companies and through what funding vehicles. Our initial read is that infrastructure companies most likely will benefit through government subsidies and/or tax relief and credits. They may also benefit from greater numbers of asset auctions, new investment opportunities, and a more accommodating regulatory environment, but timing and size here is less certain.

As it relates to Trump, initial rhetoric has focused on improving transportation and energy infrastructure (as well as social infrastructure), all of which are areas where listed infrastructure products may have exposure to companies that potentially stand to benefit from these initiatives on both a direct and indirect basis. In addition to the growth of existing companies, investors may benefit from the opportunity to invest in new companies, as well as potentially benefit from a tailwind as greater numbers of investors seek exposure to the asset class. We would further observe that this is not a phenomenon unique to the U.S., as governments in several other countries may make a similar push. While not something infrastructure investors should rely on, this may serve as yet another positive catalyst.

2. IMPACT OF A RISING RATE ENVIRONMENT:

Given the sharp rise in the U.S. 10-year Treasury yield following the election and ongoing market emphasis around Fed rate hikes, investor concern has grown over equity investments perceived to be alternatives for bonds. We believe this to be a broad market concern, though market perception may lead investors to believe the concern is greater in the infrastructure sector. To be clear, we do not view all sectors equally with regard to interest rate sensitivity and do not regard the entire asset class as a proxy for bonds. We would note that the sector is rather diverse, and despite the general concern over the asset class, initial adverse share price impacts were largely limited to network utilities and certain tower companies.

To help explain the influence of rising rates on different types of companies within the asset class, we provide two examples: one with less sensitivity to rates (toll road) and one with more (network utility). Starting with the toll road, as rates rise, both the perceived and realized cost of capital may rise (again, a broad market impact, not just related to infrastructure), placing pressure predominantly on a company's valuation discount rate. However, if rates are rising in a real sense due to higher economic growth, and we have higher inflation, then we view a toll road as having less sensitivity to interest rates because the asset will likely benefit from both higher traffic levels and the ability to charge higher tariffs for use of the asset (i.e., cash flows should go up). In the second example, for a U.S.-based utility, we view the "bond proxy" moniker as closer over the near term as cash flows are unlikely to rise short term in conjunction with rising rates. That said, while in the short term they may suffer due to their increasing cost of capital (as well as market perception), over a medium- to long-term period even network utilities' cash flows typically will adjust for higher rates as the regulator corrects the cost of capital mismatch through the rate case process. Since network utilities provide

an essential service, they will typically be allowed to receive a fair return and have rates reset higher during their next regulatory review.

Again, while it is true that certain sectors may exhibit challenged shortterm performance in relation to interest rate rises, we believe this risk can be mitigated in multiple ways. First, to the extent that certain companies are more susceptible to a rise in rates, they can be filtered out through an appropriate bottom-up stock selection process, one that is more conservative with respect to current interest rate levels. Furthermore, where rising rates may present headwinds for certain areas over near-term periods, market corrections can be used as a buying opportunity if companies represent attractive value—in our view, the key for investors is to remain focused on long-term fundamentals. Finally, investors must consider the rationale for rising rates. Should rate rises be driven by economic expansion and the market entering an inflationary phase, infrastructure may offer a measure of protection through cash flow growth.

A Compelling Case for Global Listed Infrastructure Securities

Regardless of the recent attention infrastructure has received since the election, the many potential benefits of an investment in global listed infrastructure securities remain unchanged. These include historically attractive risk-adjusted returns, diversification benefits from low correlations with other asset classes, an ability to generate current income, and potential protection against inflation—not to mention the ability to provide infrastructure exposure with daily liquidity.

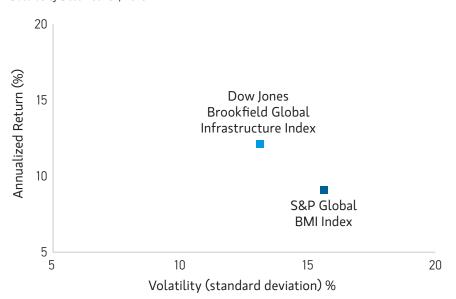
ATTRACTIVE RISK-ADJUSTED RETURNS:

Given that most infrastructure companies operate in demand-inelastic environments with high levels of regulation/contracting, it may seem intuitive to assume that the return profile of infrastructure should be lower than investments in more market-based, unregulated industries but at lower risk (defined as a permanent loss of capital). This notion of lower risk is

DISPLAY 1

Risk-Return Comparison⁵

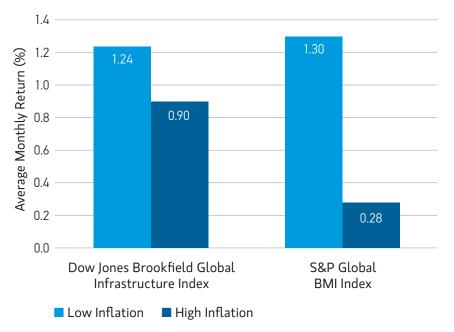
Data as of December 31, 2016



Sources: Morgan Stanley Investment Management, S&P Dow Jones. Past performance does not guarantee future results.

DISPLAY 2

Low Inflation vs. High Inflation



Sources: S&P Dow Jones from January 2003 through April 2016. Past performance does not guarantee future results.

supported by historical evidence in the credit markets, where the default rates of infrastructure companies have been considerably lower than those of the broader corporate market.³ However, as seen in *Display 1*, listed infrastructure returns have actually exceeded those of the global equities market (along with providing lower volatility) since inception of the Dow Jones Brookfield Global Infrastructure Index (DJBGI Index).

DIVERSIFICATION BENEFITS: Investors likely have minimal exposure to infrastructure through their existing equity portfolios, with the DJBGI Index representing less than 2 percent of the overall global equity universe.4 Since inception of the DJBGI Index, the correlation with global equities (as measured by the S&P Global BMI Index) is .84 while the correlation with global bonds (as measured by the Barclays Global Aggregate Index) is .54 over the same period. Though the correlation with global equities may appear high at first glance, we would observe that the magnitude of returns is entirely different. As also observed in *Display 1*, the DJBGI Index has generated annualized returns of 12.2 percent versus 9.1 percent for global equities (global bonds have generated 4.0 percent over the same period).5

AN ABILITY TO GENERATE CURRENT INCOME: One of the primary attributes of infrastructure assets is that they tend to be long-lived, and with that they

³ According to Moody's report "Default and Recovery Rates for Project Finance Bank Loans, 1983-2013 Addendum", the 10-year cumulative default rate for availability based infrastructure projects is 1.3 percent, lower than the 10-year cumulative default rate of 3.0 percent for corporate issuers rated single-A by Moody's.

As measured against the S&P Global BMI Index as of December 31, 2016.

⁵ Since inception of the Dow Jones Brookfield Global Infrastructure Index on December 31, 2002 to December 31, 2016. The Index was first calculated on July 14, 2008. Official Index data prior to this date includes back-tested performance provided by S&P Dow Jones. Back-tested performance is not actual performance, but is hypothetical. For additional important information regarding this back-tested data, please refer to the end of the brochure.

have the ability to generate long-term, stable cash flows. A comparison of indices demonstrates that infrastructure securities can provide a higher level of income compared with global equities. As of December 31, 2016, the DJBGI Index offered a dividend yield of 3.6 percent, comparing favorably to global equities, with the S&P Global BMI having a dividend yield of 2.4 percent.

POTENTIAL PROTECTION AGAINST

INFLATION: Infrastructure assets may achieve inflation protection by virtue of their remuneration structures. For regulated and contracted infrastructure, many companies are allowed a "real" return on invested capital plus explicit compensation for inflation in the countries in which the assets are domiciled. For more market-based assets, while the protection is not explicit, pricing power generally moves alongside inflation (as the operator must cover inflationary costs), and a

"floor" on the valuation exists in terms of replacement cost (which is in nominal, inflated monetary terms). As demonstrated in Display 2, if we consider global listed infrastructure securities' performance versus the broader global equity markets, it is clear that historically valuations have held up better in high inflationary periods, supporting the argument that listed infrastructure securities have provided some level of protection against a rise in inflation.6 As Trump has expressed his intentions to promote growth, this potential benefit of investing in infrastructure securities may become more prominent should he be successful.

A Comment on Investing Style

We anticipate investors may seek to capture both the historical benefits an allocation to global listed infrastructure securities can provide, and the potential tailwinds arising from prospective infrastructure initiatives in the U.S. and other countries. Investors would be well-served to remember that consistently "predicting the macro" with accuracy over multiple "events" is extremely difficult and something that is fraught with risk, as one must not only guess the outcome of the event correctly but also accurately guess the market's reaction to such outcome. The surprise outcomes of both Brexit and the U.S. presidential election highlight these risks. While we would not diminish the importance of macro considerations traffic trends will continue to have an impact on transportation companies, commodity prices are still an important consideration in the context of energy infrastructure—we believe that a bottomup analysis of infrastructure securities remains the best method for investors to recognize value in these companies.

⁶ Data in *Display 2* provided by S&P Dow Jones from January 2003 through April 2016.

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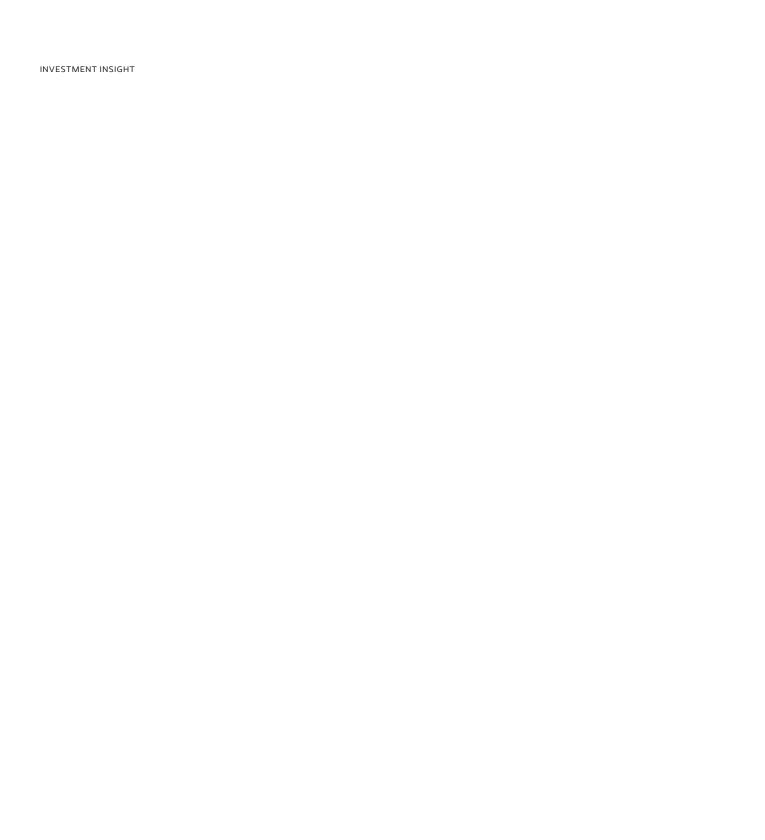
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